

ABSTRACT:

The present invention discloses inhibitors of the primary sigma factor in *Staphylococcus aureus* (σ^{SA}), an essential protein implicated in RNA synthesis. The invention 5 also discloses methods for inhibiting bacterial growth by contacting a bacterium with an antibacterial compound that specifically binds to a bacteriophage polypeptide binding domain of the *Staphylococcus aureus* primary sigma factor. Examples of inhibitors include bacteriophage polypeptides inhibiting growth of *S. aureus* and bacteriophage polypeptides binding specifically to *S. aureus* primary sigma factor. In addition, the invention discloses 10 screening methods for identifying compounds which inhibit biochemical and/or cellular activity of *S. aureus* primary sigma factor.